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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,751

09/03/2004

Katsuya Yamamoto

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07/11/2006

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EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/506,751		YAMAMOTO, KATSUYA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ariel Balaoing		2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2617

### **DETAILED ACTION**

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/08/2006 has been entered.

#### ***Response to Arguments***

1. Applicant's arguments filed 02/13/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The Applicant further discloses that claim 1 (and the unit in claim 7) using a second part 120 with a separate communication processor 122 and controller 123 (see page 9, lines 13-16 of the remarks)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The limitations of claims 1 and 7 provide for a first radio communication

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processor, a second communication processor, and a controller. However, since only a single controller is disclosed in the claims, the controller must be associated with both processing units of the mobile device in order to determine transmission control between the two transmitting units.

Furthermore, the applicant argues "Imatsuka does not teach teaching stopping the first radio communication to inhibit causing interference. To the contrary, Imatsuka teaches stopping only to avoid billing or accounting for the time when the second radio communication with the reader/writer is taking place. Moreover, Applicant submits that Imatsuka teaches away from stopping the first radio communication to inhibit communication in the second radio communication as Imatsuka clearly discloses sending the station and time codes to the partner on the call before the first radio communication call is interrupted" (see page 11, second paragraph of the remarks); the examiner respectfully disagrees. As pointed out by the applicant, Imatsuka stops the first radio communication *when the second radio communication with the reader/writer is taking place*. And while in communication with another party, sending the other party time codes **before** communication call is interrupted. The time codes are sent before communication with the reader/writer occurs. Once communication begins, communication is temporarily interrupted. Therefore, Imatsuka discloses *in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer* (when the second radio communication takes place), *temporarily stopping output of transmission data in the first radio communication with said predetermined station* (communication between the other party and the user is

temporarily interrupted) *such that the second radio communication is inhibited from causing interference in the first radio communication* (it has been well established in the art that inhibiting a wireless communication connection between one of two devices in close proximity to each other will inhibit interference to the active connection).

Furthermore, the applicant argues that neither Seppanen, Imatsuka, nor Schreier teach "stopping the inputting of transmission data into [the phone transmission] buffer" (see page 12 of the remarks); the examiner respectfully disagrees. As was shown in the previous office action, Imatsuka places the call on hold once the reader/writer is detected. Since placing a call on hold involves prohibiting bidirectional communication, data being inputted to the transmission buffer is not needed. Seppanen is used in combination to show transmission data being stored in a buffer.

2. Applicant's arguments, see page 13 of the remarks, with respect to the rejection(s) of claim(s) 13 and 14 under USC 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

3. Applicant's arguments with respect to claims 1, 3-7, and 9-14 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4 and 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 10 recite the limitation "the packets transmitted by said first radio communication processor when no data is stored in said buffer are transmitted at *the lowest transmission rate*". It is unclear as to what the lowest transmission rate refers to as a transmission rate has not been established in the claims or their dependencies.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3, 5, 7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SEPPANEN (US 6,330,442).

Regarding claims 1, IMATSUKA discloses a radio communication method in a phone having a first part operatively configured to effect a first bidirectional radio communication [cellular phone function] with a predetermined station and a second part operatively configured to effect a second bidirectional radio communication [short range radio communication function] with a reader/writer when the phone is positioned adjacent to the reader writer, (42-Figure 5) (abstract; paragraph 13), the method comprising: detecting, via the second part of the phone, as signal transmitted by the reader/writer to start the second radio communication with the reader/writer (paragraph 7-10; a short-distance radio communication function is initiated when the portable telephone is positioned in proximity of the ticket gate); and in response to detecting the

signal transmitted by the reader/writer to start the second radio communication with said reader/writer (paragraph 2, 7-10; Bluetooth communication is initiated), temporarily stopping output of transmission data in the first radio communication with said predetermined station (paragraph 7-10; paragraphs 39-53; the call in progress is temporarily interrupted in order to perform gate processing. As pointed out by the applicant, the station and time codes are sent to the partner of the call before the interruption occurs), such that the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication (paragraph 7-10; it has been well established in the art that inhibiting a wireless communication connection between one of two devices in close proximity to each other will inhibit interference to the active connection); wherein the step of temporarily stopping output of transmission data comprises stopping via a controller associated with the second part of the phone, the inputting of transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected). However IMATSUKA does not disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data. Furthermore it is well known in the art to buffer wireless communications before sending transmissions.

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. IMATSUKA further discloses transmitting packets having control data associated with said first bidirectional radio communication even when no data is stored in said buffer (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a control channel is left open between the portable device and the called party).

Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses further comprising: detecting, via the second part of the phone, the completion of said second radio communication (paragraphs 7-14, 60-69); and when completion of said second radio communication is detected, permitting the outputting of the transmission data is released (paragraphs 60-69).

Regarding claim 7, IMATSUKA further discloses a radio communication unit comprising: a first radio communication processor operatively configured to generate a first bidirectional radio communication [cellular phone function] with a predetermined station (paragraphs 11-39, 39-53), a second radio communication processor operatively configured to generate a second bidirectional radio communication [short range radio communication function; SF card] with an adjacent reader/writer (42-Figure 5) (abstract; paragraph 2, 11-39), and a controller operatively configured to detect a signal transmitted by the reader/writer for starting the second radio communication with the reader/writer and to temporarily stop output of transmission data in said first radio communication processor (paragraphs 11-39, 39-53), such that the second radio

communication is inhibited from causing interference in the first radio communication (paragraph 7-10; it has been well established in the art that inhibiting a wireless communication connection between one of two devices in close proximity to each other will inhibit interference to the active connection); wherein the controller stops the output of transmission data by temporarily inhibiting the input of the transmission data (paragraphs 6, 11-39, 62, and 63; phone call is interrupted when short range transmission is detected). However IMATSUKA does not expressly disclose wherein a buffer is used to temporarily store the transmission data for output. SEPPANEN discloses wherein a buffer is used to temporarily store the transmission data for output. (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data. Furthermore it is well known in the art to buffer wireless communications before sending transmissions.

Regarding claim 9, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses wherein the controller stops the output of transmission data while permitting the transmission of packets having control data associated with said first bidirectional radio communication, even when no data is stored (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a control channel is left open between the portable device and the called party).

Regarding claim 11, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses wherein said controller is operatively configured to detect the completion of said second radio communication and to release the processing to temporarily stop outputting the transmission data in said first radio communication processor, when completion of the radio communication in said second radio communication processor is detected (paragraphs 11-39, 38-53).

8. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of and SEPPANEN (US 6,330,442 B1), and in further view of and HARRIS et al (US 6,400,755 B1).

Regarding claim 4, IMATSUKA further discloses wherein the step of temporarily stopping output of transmission data further comprises transmitting packets having control data associated with said first bidirectional radio communication even when no data is stored (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a control channel is left open). However IMATSUKA does not expressly disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial in that it allows the mobile device to control the transmission rate of outgoing data. However, the combination of IMATSUKA and SEPPANEN do not

disclose wherein the packets transmitted when no data is stored in said buffer are transmitted at the lowest transmission rate. HARRIS discloses wherein the packets transmitted when no data is stored in said buffer are transmitted at the lowest transmission rate (abstract, column 4:lines 32-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA and SEPPANEN to transmit packets at the lowest rate when no data is being sent as taught by HARRIS since both systems disclose data transmission from a mobile device. This is beneficial in that it allows the preservation of battery power by using lowered transmission power when there is no data present.

Regarding claim 10, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. IMATSUKA further discloses wherein the controller stops the output of transmission data by temporarily inhibiting the input of the transmission data while permitting the transmission of packets having control data associated with said first bidirectional radio communication, even when no data is stored (paragraphs 6, 11-39, 62, and 63; call is placed on hold, hence no data is stored and a transmission channel is left open). However IMATSUKA does not disclose wherein the data is stored in a buffer. SEPPANEN discloses wherein transmission data is stored in a buffer (column 14:lines 37-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA to include a storage buffer for transmission data as taught by SEPPANEN as both systems disclose signal transmissions from a portable device. This is beneficial

in that it allows the mobile device to control the transmission rate of outgoing data. However, the combination of IMATSUKA and SEPPANEN do not disclose wherein the packets transmitted in said state of - having no data are transmitted at the lowest transmission rate. HARRIS discloses wherein the packets transmitted in said state of - having no data are transmitted at the lowest transmission rate (abstract, column 4:lines 32-44). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA and SEPPANEN to transmit packets at the lowest rate when no data is being sent as taught by HARRIS since both systems disclose data transmission from a mobile device. This is beneficial in that it allows the preservation of battery power by using lowered transmission power when there is no data present.

9. Claims 6 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SEPPANEN (US 6,330,442 B1), further in view of VEGA et al (US 6,282,407 B1).

Regarding claims 6 and 12, see the rejections of the parent claims concerning the subject matter these claims are dependant upon. However the combination of IMATSUKA in view of SEPPANEN does not disclose wherein the signal transmitted by the reader/writer to start the second radio communication is an electric power wave, and said second radio communication operates under power obtained by receiving electric power wave supplied from said reader/writer. VEGA discloses wherein the signal transmitted by the reader/writer to start the second radio communication is an electric power wave, and said second radio communication operates under power obtained by

receiving electric power wave supplied from said reader/writer (column 2:lines 27-40).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify IMATSUKA in view of SEPPANEN to include a passive powering means as taught by VEGA since both systems relate to using a short ranged interrogation/response communication system. This is beneficial in that no power is needed to operate the secondary transmission system when in range of the interrogator.

10. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over IMATSUKA (JP 2002095051) in view of SEPPANEN (US 6,330,442 B1), further in view of CHINTADA et al (US 2002/0118639)

Regarding claim 13, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of IMATSUKA and SEPPANEN does not expressly disclose wherein the first part of the phone includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode. CHINTADA discloses wherein a first part of a device includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode (abstract; paragraph 12).

Therefore it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to modify the combination of IMATSUKA and SEPPANEN to include a software communication model having a data-link layer to manage transmission data, as taught by CHINTADA, as the data link layer is a well known standard used in managing transmission protocols of data communication.

Regarding claim 14, see the rejections of the parent claim concerning the subject matter this claim is dependent upon. However, the combination of IMATSUKA and SEPPANEN does not expressly disclose further comprising a software-hierarchy communication model run by the radio communication processor, the communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode, wherein the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode (abstract; paragraph 12). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of IMATSUKA and SEPPANEN to include a software communication model having a data-link layer to manage transmission data, as taught by CHINTADA, as the data link layer is a well known standard used in managing transmission protocols of data communication.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 AM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ariel Balaoing – Art Unit 2617

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SUPERVISORY PATENT EXAMINER